



# Metro Phoenix

## area drainage master plan

AUGUST 2006

### Study Introduction

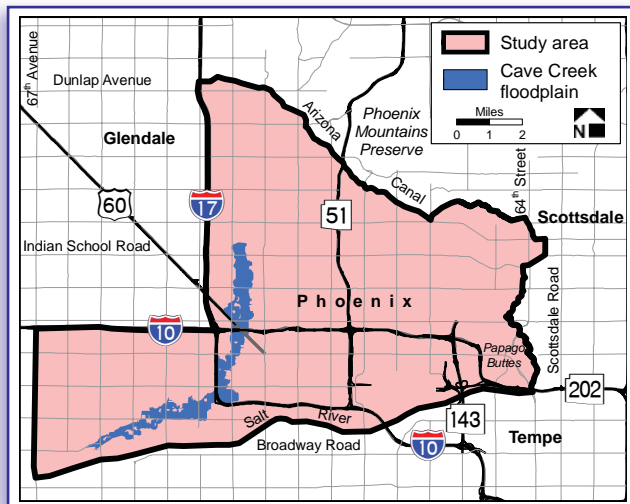
The Flood Control District of Maricopa County (District), in association with the City of Phoenix is conducting the Metro Phoenix Area Drainage Master Plan (ADMP). The purpose of the Metro Phoenix ADMP is to quantify the extent of drainage and flooding problems, sources, and hazards within portions of the Phoenix Metropolitan Area, and develop alternatives to mitigate the identified concerns.

### What is the Metro Phoenix ADMP?

The Metro Phoenix ADMP is a comprehensive drainage study of the central area of Phoenix. The study team has completed a rigorous, multidisciplinary information gathering effort. This information will be the basis for developing drainage alternatives in the study area that are technically sound, environmentally sensitive, supported by the community, and complimentary to existing land use.

### Study Area

The Metro Phoenix ADMP study area covers the older, developed portion of Phoenix, which lies downstream of the Arizona Canal and north of the Salt River, between Interstate 17 and the Papago Buttes. It is approximately 90 square miles in size. With the exception of very small parts of Scottsdale and Tempe along its eastern boundary, the study area is entirely within the city of Phoenix.

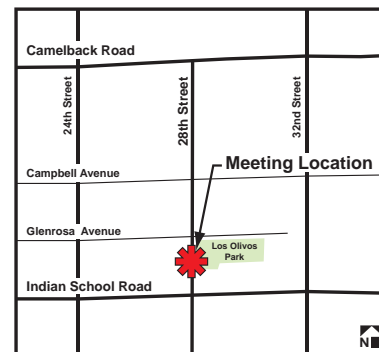


Project area

### Study Description

The Metro Phoenix ADMP consists of two phases. Phase I identified and quantified known and potential flooding hazards. Phase II will develop and recommend cost-effective flood control alternatives to alleviate or manage the identified flooding in the ADMP study area. This effort will include detailed analysis of alternatives and development of initial design drawings for the final recommended alternative.

### Public Open House



August 15, 2006, 6:00 pm to 8:00 pm

Devonshire Senior Center  
2802 E. Devonshire Ave; Phoenix, AZ  
602-256-3130

### Public Open House

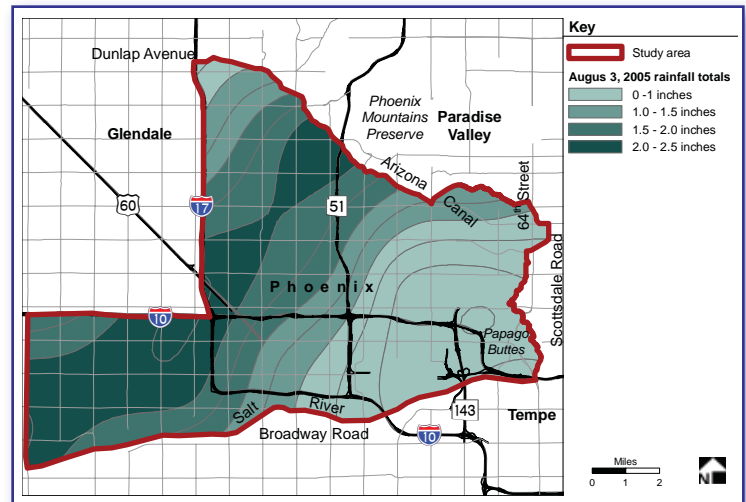
The purpose of the open house is to provide an overview of the study's current status and present any new findings or updates since the last public meetings held in July of 2005, including newly identified problem areas and areas of focus for mitigation. The study team will also briefly discuss the floodplain delineation study, however, it should be noted that neither the re-delineation of the Cave Creek floodplain nor the flood mitigation alternatives will be presented at this meeting. The study team is working diligently to gather this information with the goal of presenting new findings at a future public meeting to be held during the summer of 2007.

## Phase I Results

During the past year, the study team has collected flooding complaints, analyzed in greater detail the Cave Creek floodplain, and identified a number of flooding problems.

### Flooding Complaints

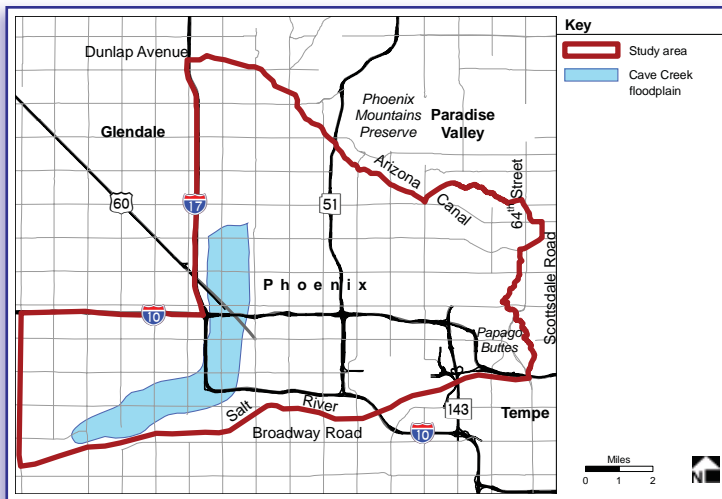
The study team has evaluated over 250 flooding complaints, more than 100 of which were submitted to the City of Phoenix after the storm on August 3, 2005. These flooding complaints have been used to help define areas of concentrated flooding problems that may warrant a regional solution to flood mitigation. The graphic to the right shows the rainfall across the study area from the August 2005 storm event.



August 3, 2005 Rainfall

### Restudy of Cave Creek Floodplain

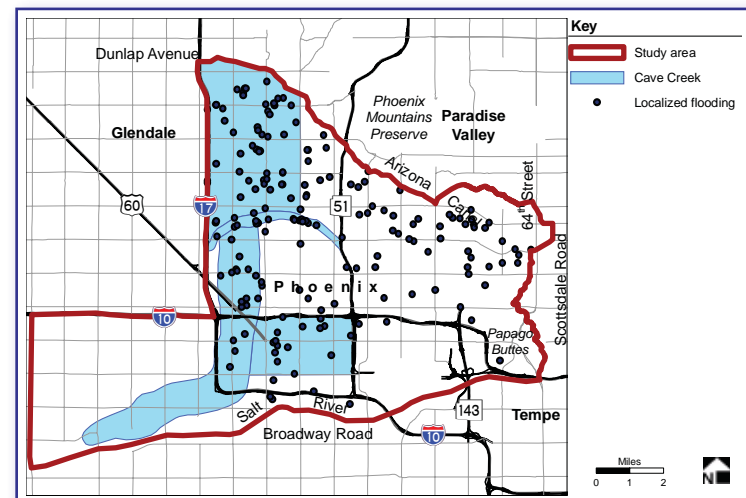
A comprehensive hydrologic model has been developed that predicts stormwater flows within the study area. The results of this model are being used to restudy the Cave Creek floodplain and will be used to quantify the flows associated with known flooding problems. Any changes to the delineated floodplain will have to be reviewed and approved by the Federal Emergency Management Agency (FEMA) before it becomes effective. The study team has been analyzing the shallow flooding that is characteristic of the Cave Creek floodplain and are working with experts at FEMA to help define the flood hazard. Due to the intricate nature of the flood hazard associated with Cave Creek, the restudy has taken more time than originally envisioned. It will take several more months to complete the floodplain delineation and gain concurrence from FEMA. We anticipate that the FEMA review will be completed by summer of 2007.



Cave Creek Floodplain

### Flooding Problems

The study team has identified several floodprone areas that will be examined in more detail. These areas are shown on the graphic to the right. In addition to these larger, regional areas requiring flood mitigation, the team will also be evaluating solutions for other, more localized flood problems in Phase II of the study. These issues include flooding along Central Avenue, north of Bethany Home Road; flooding north of Thomas Road, east of 48<sup>th</sup> Street; and flooding east of 15<sup>th</sup> Avenue and north of Glendale Avenue.



Known Flooding Problems



## July 2005 Public Meetings

The District held public meetings on July 26, 27, and 28, 2005 regarding the Metro Phoenix ADMP. The meetings were intended to provide information on the project and to receive public feedback on the drainage problems within the project area. A total of 53 people attended the initial public meetings on the study.







Participants were asked to identify any flooding issues in the project area and rate the importance of various project elements. The table to the right summarizes the results of the survey and shows the relative importance of the various project elements.

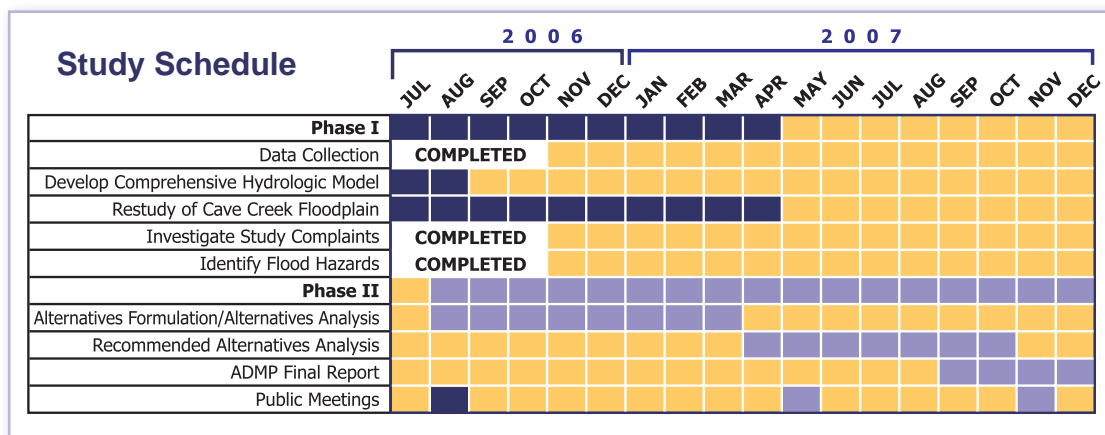
In addition, those who attended the July 2005 public meetings were asked to rate six pictures depicting various landscape character from most desirable to least desirable. The photographs below are placed in the order of their rankings.

Project Element	N <sup>a</sup>	Respondent Rating <sup>b</sup>			
		Very Important	Important	Somewhat Important	Not Important
Minimize project cost	28	15%	39%	35%	11%
Eliminate the need for flood insurance	27	70%	15%	15%	0%
Eliminate local flooding	28	43%	50%	7%	0%
Maximize regional/local access/circulation during flood events	27	22%	52%	19%	7%
Maximize greenbelt/open space	27	22%	30%	37%	11%
Provide pedestrian/equestrian/bicycle trail system	28	25%	25%	28%	22%
Optimize appearance (e.g., aesthetics)	28	25%	36%	25%	14%
Minimize removal/relocation of homes and businesses	28	32%	43%	14%	11%
Provide active recreation opportunities (e.g., soccer fields)	28	11%	14%	53%	22%
Preserve and enhance scenic quality	28	21%	46%	22%	11%
Provide underground/hidden drainage system (e.g., storm drains)	28	46%	29%	18%	7%

<sup>a</sup> Number of respondents for the given element.

<sup>b</sup> Numbers represent percentages of respondents selecting that rating for the given element.

 <p><b>1</b> <i>Semi-Soft Structural</i> Old Cross Cut Channel Storm Drain <i>* Most Desirable</i></p>	 <p><b>2</b> <i>Soft Structural</i> Wildfire Golf Course (City of Phoenix)</p>	 <p><b>3</b> <i>Hard Structural with Aesthetic Treatment</i> Private Development in Paradise Valley</p>
 <p><b>4</b> <i>Nonstructural</i> Estrella Mountain Ranch</p>	 <p><b>5</b> <i>Semi-Hard Structural</i> Tatum Wash Basin (Approx. Shea and Tatum Blvds)</p>	 <p><b>6</b> <i>Hard Structural</i> White Tanks FRS Inlet Channel <i>* Least Desirable</i></p>





Flood Control District of Maricopa County  
2801 W. Durango Street  
Phoenix, AZ 85009

## Next Steps

The study team plans to submit the restudy of the Cave Creek floodplain to FEMA in September 2006. In addition, the team will be studying preliminary concepts for mitigating the known flood problems as shown on the graphic on page 2.

The team intends to present the restudy on Cave Creek as well as the preliminary alternatives for flood mitigation at a public meeting in the first half of 2007. Anyone interested in attending this future public meeting should make sure they contact the District Project Manager (see address below) to be put on the study's mailing list. If you signed in at the July 2005 Metro Phoenix ADMP public meetings, you are automatically included on the mailing list.

### For More Information, contact:

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Email: afa@mail.maricopa.gov

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